

## Freeform Search

US Pre-Grant Publication Full-Text Database

US Patents Full-Text Database

US OCR Full-Text Database Database: EPO Abstracts Database

JPO Abstracts Database

**Derwent World Patents Index** 

**IBM Technical Disclosure Bulletins** 

Term:

and (remote with print\$ with transmit\$ with (status\$))

Display:

Documents in Display Format: KWIC Starting with Number 1

Generate: O Hit List O Hit Count O Side by Side O Image

Search

Clear

Interrupt

## Search History

DATE: Wednesday, May 25, 2005 Printable Copy Create Case

Name side by side	Query	Hit Count	<u>Set</u> <u>Name</u> result set
DB=U	ISPT; PLUR=YES; OP=ADJ		
( <u>13</u> )	L1 and (remote with print\$ with transmit\$ with (status\$))	8	<u>L3</u>
<u>L2</u>	L1 and (remote with print\$ with transmit\$ with (condition\$ or event\$ or criterion\$))	5	<u>L2</u>
<u>L1</u>	709/\$.ccls.	17919	<u>L1</u>

**END OF SEARCH HISTORY** 

# Previous Doc Next Doc Go to Doc# First Hit Fwd Refs

		.1
بسو	Canarata Calinatina	3
1 :	Generate Collection	3
		а

L3: Entry 1 of 8 File: USPT Jun 8, 2004

DOCUMENT-IDENTIFIER: US 6747754 B1

TITLE: Image processing apparatus and its status information notifying method

<u>Current US Cross Reference Classification</u> (2): 709/206

<u>Current US Cross Reference Classification</u> (3):

<u>Current US Cross Reference Classification</u> (4): 709/219

#### CLAIMS:

- 6. A method for <u>transmitting status</u> information about at least one operational section of an image processing apparatus, the image processing apparatus having at least one of a <u>printer</u>, a scanner, and a facsimile as a operational section, and a memory storing a hypertext which has an applet embedded therein, the method comprising: <u>transmitting</u> the hypertext including the applet to a <u>remote</u> terminal when the hypertext is requested by the <u>remote</u> terminal; connecting the remote terminal with the image processing apparatus when a connection request from the remote terminal is detected, the connection request being made by the applet embedded in the hypertext transmitted to the remote terminal; transmitting, to the remote terminal, status information regarding each operational section of the image processing apparatus when a status request from the remote terminal is detected; checking for a change of the status information regarding each operational section of the image processing apparatus at predetermined intervals; transmitting updated status information regarding an operational section when a change has occurred.
- 8. A method for <u>transmitting status</u> information about at least a <u>printer</u> as an operational section of an image processing apparatus, a memory storing a hypertext which has an applet embedded therein, the method comprising: <u>transmitting</u> the hypertext including the applet to a <u>remote</u> terminal when the hypertext is requested by the <u>remote</u> terminal; connecting the remote terminal with the image processing apparatus when a connection request from the remote terminal is detected, the connection request being made by the applet embedded in the hypertext transmitted to the remote terminal; and transmitting, to the remote terminal, status information regarding each operational section of the image processing apparatus, when a status request from the remote terminal is detected; wherein the information includes information which indicates where in the printer a paper jam has occurred.

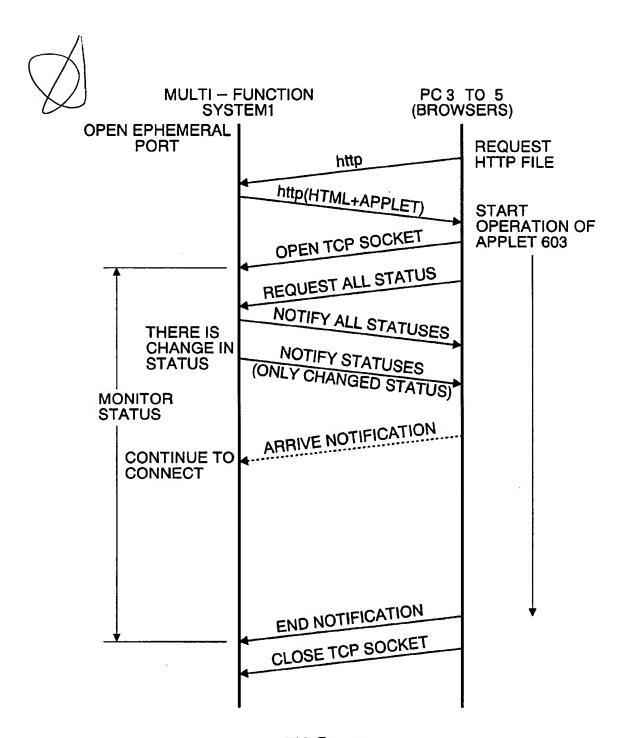


FIG. 5



US006747754B1

# (12) United States Patent Ivoki

(10) Patent No.:

US 6,747,754 B1

(45) Date of Patent:

Jun. 8, 2004

(54)	IMAGE PROCESSING APPARATUS AND ITS
	STATUS INFORMATION NOTIFYING
	METHOD

(75) Inventor: Yutaka Iyoki, Kawasaki (JP)

(73) Assignce: Panasonic Communications Co., Ltd.,

Fukuoka (JP)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/458,962

(22) Filed: Dec. 10, 1999

### (30) Foreign Application Priority Data

Jul. 22, 1999 (JP) 11-20	07318
51) Int. Cl. <sup>7</sup> G06F 15/00; G06F 1	
H06K 52) U.S. Cl 358/1.15; 709/219; 709	/217;
700/206+ 261	7700

(56) References Cited

#### U.S. PATENT DOCUMENTS

6,125,186	Α	٠	9/2000	Saito et al	380/287
6,209,029	<b>B</b> 1	٠	3/2001	Epstein et al	709/219
6,230,189	B1	•	5/2001	Sato et al	709/206
6,289,371	B1	٠	9/2001	Kumpf et al	709/203
6,539,422	<b>B</b> 1	*	3/2003	Hunt et al	709/217
6,549,423	<b>B</b> 1	•	4/2003	Brodnick	361/798

#### FOREIGN PATENT DOCUMENTS

10-79826

JP

3/1998

JP	10124418	3/1998
JP	10124418	5/1998
JP	10269039	10/1998
JP	11031114	2/1999
JР	11184784	7/1999
wo	97/38510	10/1997

#### OTHER PUBLICATIONS

English Language Abstract and English translation of a portion of JP 10-269039.

English Language Abstract of JP 11-031114. English Language Abstract of JP 11-184784. English Language Abstract of JP 10-124418. English Language Abstract of JP 10-79826.

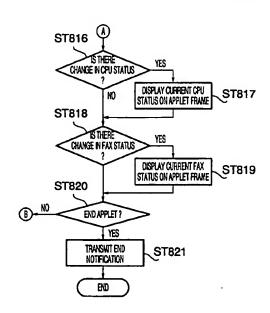
\* cited by examiner

Primary Examiner—Kimberly Williams
Assistant Examiner—Sacid Ebrahimi
(74) Attorney, Agent, or Firm—Greenblum & Bernstein,
P.L.C.

#### (57) ABSTRACT

A multi-function system boots up a WWW server in which an applet is embedded. When a browser, which is executed on PCs, requests an HTTP file, the multi-function system transfers the HTML file and the applet. The browser executes the applet. The applet opens a TCP socket and starts communications between the multi-function and the applet. A status information obtaining section of the multi-function system obtains a status of each section of the multi-function system in response to a request from the applet, and the multi-function system notifies the applet of status information. The applet displays the status of each section. This makes it possible to send notification of the status of each section to PCs.

### 9 Claims, 11 Drawing Sheets



Record Display Form Page 1 of 1

# Previous Doc Next Doc Go to Doc# First Hit Fwd Refs



## Generate Collection

L3: Entry 3 of 8 File: USPT Nov 5, 2002

DOCUMENT-IDENTIFIER: US 6477570 B1

\*\* See image for Certificate of Correction \*\*

TITLE: Information processing system and method therefor

#### Detailed Description Text (132):

FIG. 47 is a diagram showing the condition that exists when, while, in FIG. 41B, the scanner 411 is instructed to output the information that is read to the <u>printer</u> 412 along route A and to confirm the <u>status of the printer</u> 412, since the <u>printer</u> 412 is located in a <u>remote</u> area, the scanner 411 takes the <u>status</u> of the network into account and unconditionally <u>transmits</u> the information to the <u>printer</u> 412, which then, because a malfunction has occurred there, transfers the received information (job) to the printer 413.

#### <u>Detailed Description Text</u> (140):

At step S440, while the scanner 411 communicates with the <u>printer</u> 412 and attempts to acquire its <u>status</u>, it is found that the <u>printer</u> 412 is in a <u>remote</u> area and the scanner 411 decides to <u>transmit</u> the information, regardless of the <u>status of the printer</u> 412. At step S441 it is determined that there is no problem with the printer 412 since it is in a remote area, and at step S442 the scanned information is transmitted to the printer 412, which is the designated apparatus, and the job is transferred thereto. Since the instructed job has been terminated, the scanner 411 waits for the next job.

<u>Current US Original Classification</u> (1): 709/224

<u>Current US Cross Reference Classification</u> (2): 709/219

Previous Doc Next Doc Go to Doc#

:



US006477570B1

## (12) United States Patent

Takayama et al.

### (10) Patent No.:

## US 6,477,570 B1

(45) Date of Patent:

\*Nov. 5, 2002

## (54) INFORMATION PROCESSING SYSTEM AND METHOD THEREFOR

(75) Inventors: Masayuki Takayama, Kashiwa (JP);
Shouichi Ibaraki, Tokyo (JP); Aruna
Rohra Suda, Yokohama (JP);
Masanori Wakai, Tokyo (JP); Shuichi
Mikame, Tokyo (JP); Kenichi Fujii,
Yokohama (JP); Satomi Takahashi,
Yokohama (JP); Suresh Jeyachandran,

Yokohama (JP)

#### (73) Assignce: Canon Kabushiki Kaisha, Tokyo (JP)

(\*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 08/999,143

(22) Filed: Dec. 29, 1997

#### (30) Foreign Application Priority Data

(51)	Int. Cl. <sup>7</sup>	· · • • • • • • • • • • • • • • • • • •	 G06F	15/173;	H04N	1/32

(52) U.S. Cl. ...... 709/224; 709/219; 358/1.15

(56) References Cited

#### U.S. PATENT DOCUMENTS

5,127,047 A	•	6/1992	Bell et al	379/100.06
5,179,637 A	٠	1/1993	Nardozzi	395/114

5,187,708 A	• 2/1993	Nakatani et al 370/469
5,220,674 A	• 6/1993	Morgan et al 395/800
5.287.194 A	* 2/1994	
5,437,032 A	• 7/1995	
5,448,277 A	• 9/1995	
5,504,894 A	• 4/1996	
5,577,172 A	11/1996	
5,580,177 A	* 12/1996	
5.611.050 A	* 3/1997	
5,617,518 A	• 4/1997	
5,659,795 A	* 8/1997	
5,712,712 A	* 1/1998	
5,721,686 A	* 2/1998	
5,802,260 A	• 9/1998	
5,813,348 A	• 9/1998	
5,848,261 A	* 12/1998	
5,905,852 A	• 5/1999	
5,930,465 A	• 7/1999	
5,933,580 A	• 8/1999	
5,978,594 A	* 11/1999	
6,141,662 A	10/2000	

#### FOREIGN PATENT DOCUMENTS

Ξ <b>P</b>	0656581	6/1995
VO	WO 96/01449	1/1996

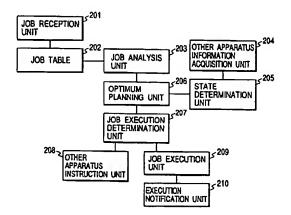
<sup>\*</sup> cited by examiner

Primary Examiner—Zarni Maung
Assistant Examiner—Jason D. Cardone
(74) Attorney, Agent, or Firm—Fitzpatrick, Cella, Harper & Scinto

#### (57) ABSTRACT

In an information processing system wherein a printer and a personal computer are connected together, when the printer receives a print job from a scanner, as there are a plurality of processes corresponding to the received printed job, the printer distinguishes between a print process to be performed by the printer and a print notification process to be performed for a user by the personal computer. When the printer initiates printing, it instructs the personal computer to perform the print notification process. Upon receipt of the instruction, the personal computer calls a user to notify the user that printing has been initiated.

### 35 Claims, 112 Drawing Sheets



358/1.15

Record Display Form Page 1 of 1



# Previous Doc Next Doc Go to Doc# First Hit Fwd Refs

## Generate Collection

L3: Entry 5 of 8

File: USPT

Feb 17, 1998



DOCUMENT-IDENTIFIER: US 5720013 A

TITLE: Scanner printer server and method for selectively outputting scanned information to an information processing apparatus in accordance with a pre-scan command and a scan command

#### Detailed Description Text (230):

Since scanning or <u>printing</u> of the image cannot be performed in a <u>remote</u> manner during the copying operation, the server process 107 <u>transmits the STATUS</u> packet denoting the fact that copying is being performed to the client process 106 when it has received the scan packet or the <u>print</u> packet so as to notify the user that scanning or <u>printing</u> cannot be performed.

<u>Current US Cross Reference Classification</u> (2): 709/203

#### US005720013A

## United States Patent [19]

Uda et al.

[11] Patent Number:

5,720,013

[45] Date of Patent:

Feb. 17, 1998

SCANNER PRINTER SERVER AND
METHOD FOR SELECTIVELY
<b>OUTPUTTING SCANNED INFORMATION TO</b>
AN INFORMATION PROCESSING
APPARATUS IN ACCORDANCE WITH A
PRE-SCAN COMMAND AND A SCAN
COMMAND

[75] Inventors: Toyokazu Uda, Yokohama; Susumu Sugiura, Atsugi; Makoto Takaoka, Yokohama; Shigetada Kobayashi, Tokyo, all of Japan

[73] Assignee: Canon Kabushiki Kaisha, Japan

[21] Appl. No.: 384,865

[22] Filed: Feb. 7, 1995

#### Related U.S. Application Data

[62] Division of Ser. No. 939,144, Sep. 2, 1992.
[30] Foreign Application Priority Data

Feb. 13, 1992	[JP]	Japan	3-224218 
[51] Int. CL <sup>6</sup>			G06F 15/16

 [56] References Cited

#### U.S. PATENT DOCUMENTS

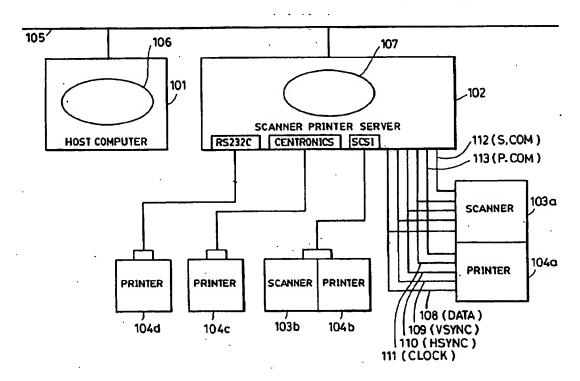
4,656,524	4/1987	Nomis et al	358/401
4,656,525	4/1987	Norris	358/532
4,837,635	6/1989	Santos	358/401
5,123,063	6/1992	Ohkubo	358/408
5,130,824	7/1992	Miyakawa et al	358/486
5,220,674	6/1993	Morgan et al.	395/200
5,280,585	1/1994	Kochis et al	358/442
5,283,662	2/1994	Nakajima	358/409
5,295,204	3/1994	Parulski	382/167
5,301,244	4/1994	Parulski	382/319

Primary Examiner—Scott A. Rogers
Attorney, Agent, or Firm—Pitzpatrick, Cella, Harper & Scinto

#### [57] ABSTRACT

A variety of parameters for a scanner printer are set from a host computer on a network by arranging a scanner printer server system composed of the host computer and the scanner printer server connected to the network, and a scanner and a printer connected to the scanner printer. The scanner printer server system has a bidirectional communication channel formed between the scanner, the printer and the scanner printer server, wherein characters, graphics and a method of transferring image are instructed from the host computer and the data is transferred by the instructed transference method.

#### 14 Claims, 19 Drawing Sheets



## Previous Doc Next Doc Go to Doc# First Hit Fwd Refs

Generate Collection

L3: Entry 6 of 8

File: USPT

Mar 18, 1997

DOCUMENT-IDENTIFIER: US 5613160 A

\*\* See image for Certificate of Correction \*\*

TITLE: In an interactive network board, method and apparatus for placing a network

peripheral in a default configuration



 $\frac{\text{Current US Cross Reference Classification}}{709/250} \hspace{1.5cm} \textbf{(3):} \\$ 





13. A <u>printer</u> according to claim 7, wherein said <u>printer</u> means generates <u>printer</u> status data, and wherein said processor (1) queries said <u>printer</u> means at a predetermined interval and stores the <u>printer status</u> data in said RAM, and (2) transmits the stored <u>printer status</u> data over the LAN through said LAN interface in response to a <u>status</u> request received from a <u>remote</u> LAN location through said LAN interface.



#### US005613160A

## United States Patent [19]

#### Kraslavsky et al.

## Patent Number:

5,613,160

Date of Patent:

Mar. 18, 1997

#### [54] IN AN INTERACTIVE NETWORK BOARD, METHOD AND APPARATUS FOR PLACING A NETWORK PERIPHERAL IN A DEFAULT CONFIGURATION

[75] Inventors: Andrew J. Kraslavsky, Rancho Santa Margarita; William C. Russell, Laguna Hills; George A. Kalwitz; Robert D. Wadsworth, both of Costa Mesa; Lorraine F. Barrett, Yorba Linda, all

of Calif.

[73] Assignee: Canon Kabushiki Kaisha, Tokyo, Japan

[21] Appl. No.: 978,517

[22] Filed: Nov. 18, 1992

[51] Int. Cl.6 .... 395/839; 395/200.11; 395/114; 395/117;

395/200.02 [58] Field of Search ..... ..... 395/800, 275, 395/114, 700, 11, 500, 106, 109, 113, 115, 200, 117, 650, 600, 425, 725, 155, 828, 836, 838, 839, 200.11, 200.02, 200.17; 340/825.52; 370/85.8

#### [56] References Cited

#### U.S. PATENT DOCUMENTS

4,742,483	5/1988	Morrell	364/900
4,866,664	9/1989	Burkhardt, Jr., et al	364/900
4,974,199	11/1990	Verbanets, Jr., et al	364/900
5,007,013	4/1991	Elms	364/900
5,018,079	5/1991	Shukunami et al	364/519
5,050,098	3/1991	Brown, III et al	395/112
5,075,875	12/1991	Love et al	395/117
5,197,128	3/1993	Campbell et al	39 <i>5/</i> 275
5,220,674	6/1993	Morgan et al	395/800
5,293,466	3/1994	Bringmann	395/114
5,317,693	5/1994	Cuenod et al	395/275
5,428,748	6/1995	Davidson et al	39 <i>5/</i> 275

#### FOREIGN PATENT DOCUMENTS

2-53105 2/1990 Japan.

#### OTHER PUBLICATIONS

"Method To Download External File To Printer At Job Initiation" IBM Technical Disclosure Bulletin, Dec. 1987, vol. 30, No. 7 p. 368.

"Printer Attachment/Server Architecture For Token Ring Local Area Network", IBM Technical Disclosure Bulletin, Aug. 1990, vol. 33, No. 3A, pp. 407-408.

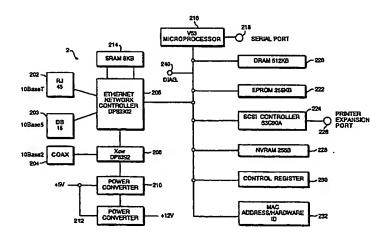
"Appending Control Code To Plane Text File", IBM Technical Disclosure Bulletin, Aug. 1991, vol. 34, No. 3, pp. 417-420.

Primary Examiner-Larry D. Donaghue Attorney, Agent, or Firm-Fitzpatrick, Cella, Harper &

#### [57] ABSTRACT

Method and apparatus for placing a Local Area Network (LAN) printer in a default configuration includes a printer non-volatile memory for storing a default configuration code, and a printer device for rendering print. A Small Computer System Interface (SCSI) is coupled to the printer device, for transmitting print data to the printer device. The SCSI is also coupled to the printer non-volatile memory for transmitting the default configuration code from the printer non-volatile memory. A LAN interface is provided for receiving print data from the LAN, and a RAM is coupled to both the SCSI and the LAN interface, for storing the print data and the default configuration code. A processor is coupled between the SCSI interface and the LAN interface, for (1) reading the default configuration code from the printer non-volatile memory to the RAM, (2) ordering the print data into a print job block, (3) appending the default configuration code to the print job block, and (4) transmitting the print job block and appended default configuration code to the printer device through the SCSI interface. Then, the printer device (1) renders print in accordance with the received print job block, and (2) before or after the print has been rendered, places itself in a predetermined default configuration in accordance with the appended default configuration code.

21 Claims, 31 Drawing Sheets



DB=USPT; PLUR=YES; OP=ADJ

L1 and (remote with print\$ with transmit\$ with (condition\$ or event\$ or criterion\$))

<u>L2</u> 5

709/\$.ccls. <u>L1</u>

17919 <u>L1</u>

## **END OF SEARCH HISTORY**

#### Previous Doc Next Doc Go to Doc# First Hit Fwd Refs

Generate Collection

L2: Entry 3 of 5

File: USPT

Jul 7, 1998

DOCUMENT-IDENTIFIER: US 5778183 A

TITLE: Apparatus and method of automatically transmitting event-related information to a user of a network printing system

#### Brief Summary Text (80):

While, for the most part, the approach employed by Hewlett-Packard, as described above, is advantageous for the group as a whole, it can create an annoyance in certain situations. For example, in a group including a first user and a second user, the print job belonging to the first user may be completed at a printer remote to both users. In the above-described approach, it is understood that both users will receive a trap or message indicating that the job of the first user has been completed. Under ideal circumstances, however, the second user would prefer not to hear about the occurrence of events that effect only the first user. Additionally, the approach employed by Novell, as described above, appears to be inappropriate for use with a remote printer employing a print queue. That is, when the print queue is employed, it is not believed that the Novell network server has any way of knowing when printing of a job in the queue is completed. Moreover, the Novell approach appears somewhat limited in application since it is platform dependent. It would be desirable to provide a system that is platform independent in which a message regarding the occurrence of an event at a printing machine (or any output device) employed by and remote to a group of users is transmitted only to the specific recipient affected by such occurrence.

Current US Original Classification (1):

709/223

alb - 47 Current US Cross Reference Classification (1): 709/202

Current US Cross Reference Classification (2): 709/219



US005778183A

## United States Patent [19]

Filion et al.

[11] Patent Number: 5,778,183

[45] Date of Patent:

\*Jul. 7, 1998

[54]	APPARATUS AND METHOD OF
	AUTOMATICALLY TRANSMITTING EVENT-
	RELATED INFORMATION TO A USER OF A
	NETWORK PRINTING SYSTEM

[75] Inventors: Joseph L. Filion, Fairport, N.Y.; Charles F. Evans, Norwood, Mass.; Kenneth E. Rohlfing, Honeoye Falls, N.Y.; Diane S. Rogerson, Greece, N.Y.; Kitty S. Koul; Mei-Yuei Lee, both of Pittsford, N.Y.; Craig W. Jacobs, Fairport, N.Y.

[73] Assignee: Xerox Corporation, Stamford, Conn.

[\*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: 489,347
 [22] Filed: Jun. 12, 1995
 [51] Int. CL<sup>6</sup>

[56]

## References Cited

#### U.S. PATENT DOCUMENTS

3,597,071	8/1971	Jones	355/3
4,821,107	4/1989	Naito et al	358/256
5,021,892	6/1991	Kito et al	358/468
5,047,955	9/1991	Shope et al	364/519
5,170,340	12/1992	Prokop et al	364/143
5,175,633	12/1992	Saito et al	358/406
5,220,674	6/1993	Morgan et al	395/800
5,223,948	6/1993	Sakurai et al	358/404
5,301,262	4/1994	Kashiwagi	395/117
5,307,458	4/1994	Freiburg et al	395/162
5,367,635	11/1994	Baner et al	395/200

5,491,796	2/1996	Wanderer et al	395/200
5,559,933	9/1996	Boswell et al	395/114

#### FOREIGN PATENT DOCUMENTS

529818A2	3/1993	European Pat. Off
653700A1	5/1995	European Pat. Off 395/114
1531401	11/1978	United Kingdom.

#### OTHER PUBLICATIONS

Nyc, Xlib Programming Manual, O'Reilly and Assoc., pp. 5,16,17,250, Mar. 1993.

Softbase Reviews, Xprinter 3.0, Info Sources Inc., Mar. 1992.

Nye(2). Adrian Nye, X Protocol Reference Manual, O'Reilly & Assoc., pp. 6-7,11-12,29-30, Jul. 1989. Xprinter, Softbase, Xprinter 3.0, Info Sources Inc., p. 1, Mar. 1907.

Primary Examiner—Alvin E. Oberley Assistant Examiner—R. S. Rosenhalm Attorney, Agent, or Firm—Gary B. Cohen

#### 7] ABSTRACT

An automatic transmitting system for use in a networked printing system including a first client, second client and server. The automatic transmitting system includes an agent, operatively associated with the server, for maintaining information regarding a plurality of subsystems associated with a printing machine—the agent communicates with both the first and second clients. The automatic transmitting system further includes a registration system, including the first client, the second client and the agent, for registering the information. The information includes a first identifier and a second identifier, the first and second identifiers being stored with the agent and corresponded with first and second sets of information, respectively. In practice, the agent transmits the first set of information exclusively to the first client when a first event occurs in one or more of the plurality of subsystems and transmits a second set of information exclusively to the second client when a second event occurs in one or more of the plurality of subsystems.

5 Claims, 7 Drawing Sheets



# Previous Doc Next Doc Go to Doc# First Hit Fwd Refs

Generate Collection

L2: Entry 2 of 5 File: USPT Aug 21, 2001

DOCUMENT-IDENTIFIER: US 6279000 B1

TITLE: Information processing apparatus for managing schedule data and a method

therefor

#### Detailed Description Text (153):

FIG. 47 is a diagram showing the <u>condition</u> that exists when, while, in FIG. 41B, the scanner 411 is instructed to output the information that is read to the <u>printer</u> 412 along route A and to confirm the status of the <u>printer</u> 412, since the <u>printer</u> 412 is located in a <u>remote</u> area, the scanner 411 takes the status of the network into account and unconditionally <u>transmits</u> the information to the <u>printer</u> 412, which then, because a malfunction has occurred there, transfers the received information (job) to the <u>printer</u> 413.

<u>Current US Cross Reference Classification</u> (1): 709/206

<u>Current US Cross Reference Classification</u> (2): 709/246



## (12) United States Patent

Suda et al.

## (10) Patent No.: US 6,279,000 B1

(45) Date of Patent: \*Aug. 21, 2001

#### (54) INFORMATION PROCESSING APPARATUS FOR MANAGING SCHEDULE DATA AND A METHOD THEREFOR

(75) Inventors: Aruna Rohra Suda, Yokohama; Masayuki Takayama, Kashiwa;

Masanori Wakai, Tokyo; Suresh Jeyachandran, Yokohama, all of (JP)

(73) Assignee: Canon Kabushiki Kaisha, Tokyo (JP)

(\*) Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C.

154(a)(2).

Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21)	Appl.	No.:	08/998,927
------	-------	------	------------

(22) Filed: Dec. 29, 1997

### (30) Foreign Application Priority Data

reb.	20, 1777	(Jr)	9-044320
(51)	Int. Cl.7		G06F 7/24
(52)	U.S. Cl.	••••••	707/10; 709/206; 709/246
(58)	Field of	Search	707/10, 5, 530,

707/531, 9, 2, 3, 4, 8; 395/500; 709/246, 206, 207, 217, 208; 340/825; 345/333, 334, 335

#### (56) References Cited

#### U.S. PATENT DOCUMENTS

4,754,428 *	6/1988	Schultz et al	709/246
5,247,677	9/1993	Welland et al	395/650
5,339,392 *	8/1994	Risberg et al	345/333

5,664,175		9/1997	Jackson et al	395/607
5,790,790	٠	8/1998	Smith et al	709/206
5,790,974		8/1998	Tognazzini	701/204
5,826,269	٠	10/1998	Hussey	. 707/10

#### FOREIGN PATENT DOCUMENTS

0 478 346 A2 1/1992 (EP). 0 867 823 A2 9/1998 (EP).

#### OTHER PUBLICATIONS

Patent Abstracts of Japan, vol. 018, No. 391 (P-1774), Jul. 21, 1994 & JP 06 110704A (Fuji Xerox Co Ltd), Apr. 22, 1994.

Patent Abstracts of Japan, vol. 096, No. 003, Mar. 29, 1996 & JP 07 295767A (Canon Inc), Nov. 10, 1995.

O'Connor K et al: "Managing Contacts in Windows 95 GoldMine for Windows 95" PC User, No. 280, Apr. 3, 1996. "Method for Personal Digital Assistance Calendar Export Nomenclature", IBM Technical Disclosure Bulletin, vol. 37, No. 3, Mar. 1, 1994.

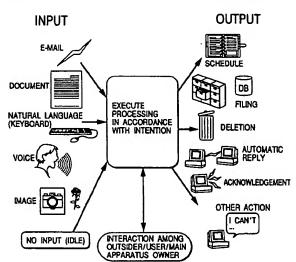
#### \* cited by examiner

Primary Examiner—Wayne Amsbury
Assistant Examiner—Thu-Thao Havan
(74) Attorney, Agent, or Firm—Fitzpatrick, Cella, Harper &
Scinto

#### (57) ABSTRACT

When electronic mail is received, the contents of the electronic mail is analyzed, and an item concerning a schedule is extracted from the analysis results. When the date associated with the extracted item is advanced to the present time, the item is stored as a user's schedule in a database employed for the storage of schedule data. Schedule data that conflict with the item are searched for in the database. To rearrange conflicting schedules, a change in a schedule is requested to the transmission source, or the priorities of the conflicting schedules are compared, and the cancellation of a schedule having a low priority is proposed to a user.

### 29 Claims, 112 Drawing Sheets



Record List Display

Page 1 of 3

Kradeveles

## Hit List

Clear Generate Collection Print Fwd Refs

see 77 1

Bkwd Refs

Generale OACS

Search Results - Record(s) 1 through 1 of 1 returned.

1. Document ID: US 5613160 A

L5: Entry 1 of 1

File: USPT

Mar 18, 1997

DOCUMENT-IDENTIFIER: US 5613160 A

\*\* See image for Certificate of Correction \*\*

TITLE: In an interactive network board, method and apparatus for placing a network

peripheral in a default configuration

<u>Detailed Description Text</u> (2):

Coll 60 In its general aspects, the present invention provides hardware and software solutions for making a network peripheral, such as a printer, an interactive network member capable not only of receiving and processing data received from the network, but of transmitting to the network significant amounts of data such as  $oldsymbol{\mathcal{U}}$  detailed  ${f status}$  information, operational parameters, and even data input to the peripheral through other modalities such as scanning, facsimile reception, etc. By integrating such hardware and software with the peripheral, it is possible to eliminate the requirement for dedicating a personal computer to the peripheral to act as a peripheral server.

<u>Detailed Description Text</u> (66):

Furthermore, configuration data for the printer accessible to the network through the use of CPCONSOL includes: (A) network group information such as protocol type, the node name, the file server name, routing, POST error code, NEB firmware level, MAC address, server mode; and (B) printer group information such as safe (default) environment, font, disk present, disk size, initial environment, logging on/off, log file size, configured/nonconfigured, and net name. Additionally, logs can be kept of print job flow, print engine usage, and network behavior. Examples of such usage and statistical log entries include: (A) network group information such as receive statistics, transmit statistics, and non-media related information; (B) job entry information such as date/time/time zone, log-in (user's name), job name, J32 pages, copy-count, and print status; (C) initialization entry information; (D) error condition entry information: (E) clear log entry information; and (F) printer group information such as the number of jobs, pages/job, pages/minute, time/job,

total pages/day, total jobs/day, number of days and total resets.

<u>Detailed Description Text</u> (75):

The present invention takes advantage of the bi-directional nature of the communication between the printer and the NEB, and the NEB's ability to process information on a multi-tasking basis. That is, the bi-directional SCSI bus can transmit large quantities of data both to and from the printer, enabling the NEB to receive large quantities of specific status data from the printer or even data input from the peripheral (such as image data input from a scanner). The NEB microprocessor processes information on a multi-tasking basis (sequential but shared) effectively parallel processing information received from the network and information received from the printer. This multi-tasking processing insures that the NEB is responsive to both the network and the printer on a near real-time

basis.

#### Detailed Description Text (82):

Steps S9 through S12 comprise a so-called "autologging" function which is carried out in the NEB by the CPSOCKET program in order to automatically and systematically provide status information from the printer to the LAN (autologging will be 16/6 discussed in greater detail in section 4k below). In Step S9, if midnight has not been reached the procedure advances to Step S13. However, once midnight is reached, the NEB microprocessor 216 transmits a request to the printer over the SCSI bus for the printer to return current status to the NEB. For example, the printer may return the cumulative number of pages printed to the NEB. In Step S11, the NEB microprocessor 216 calculates printer statistics such as pages per job or pages per day, the NEB having kept track of the number of jobs sent to the printer and the date. At Step S12, the printer statistics are transferred to a non-volatile memory such as the printer's hard disk 114 or NVRAM 111, or the NEB's NVRAM 228. Alternatively, Steps S10, S11, S12 may be performed before Step S9, so that statistics are stored every minute.

#### Detailed Description Text (100):

At Step S28, the microprocessor 216 retrieves the requested status data from DRAM 220, assembles the status data, and sends it to the LAN through the LAN interface (to be discussed in greater detail in section 4i below). Thus, in Step S28, more than simple "on/off" information may be transmitted to the LAN so as to inform the LAN of the detailed status of the printer. In a broad application, Step S28 encompasses the export of printer front panel status over the LAN, and the import of front panel control commands from the LAN. That is, the network administrator at the PC 14 may request and receive a display indicating all of the printer information included on the printer front panel display 116. The network administrator may then activate different printer front panel functions on his/her PC, and such functions will be transmitted to the printer where the selected control will be effected.

#### CLAIMS:

13. A printer according to claim 7, wherein said printer means generates printer status data, and wherein said processor (1) queries said printer means at a predetermined interval and stores the printer status data in said RAM, and (2) transmits the stored printer status data over the LAN through said LAN interface in response to a status request received from a remote LAN location through said LAN interface.

Full   Title   Citation   Front   Review   Classification   Date   Reference	Claims K	ONC - Drawa De
Clear Generate Collection Print Fwd Refs Bkwd Refs	Generate	
Term	Documents	
"5613160"	1	
5613160S	0	
PRINT\$	0	
PRINT	1114	
PRINTABILITY	36	

PRINTABLE	81
PRINTABLE/WRITABLE	. 1
PRINTBAR	3
PRINTBARS	1
PRINTCHECK	2
PRINTED	2324
((5613160.PN.) AND (PRINT\$ WITH TRANSMIT\$ WITH (STATUS\$)) ).USPT.	1

There are more results than shown above. Click here to view the entire set.

<b>Display Format:</b>	KWIC	Change Format
------------------------	------	---------------

Previous Page Next Page Go to Doc#